

Notice of Allowability

Application No.

10/743,500

Examiner

Roberto Rábago

Applicant(s)

MURE ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☐ The drawings filed on ____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 4/13/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The amendment to claim 29 corrects the dependency for proper agreement with the parent claim, and the amendment to claims 10 and 26 corrects a formal matter. Authorization for this examiner's amendment was given in a telephone interview with Mr. Alan Wagner on 3/18/2005.

In the claims:

In claim 29, change "17" to --27--.

10. (amended) The process of Claim 1 wherein the monomer further comprises at least one of propene, isobutylene, 1-butene, 1-hexene, 4-methyl-1-pentene, 1-octene, 5-ethylidene-2-norbornene, piperylene, styrene, halo- or alkyl substituted styrenes, tetrafluoroethylene, vinylbenzocyclobutene, 1,4-hexadiene, 1,5-hexadiene, 1,7-octadiene, 4-vinylcyclohexene, vinylcyclohexane, 2,5-norbornadiene, 1,3-pentadiene, 1,4-pentadiene, 1,3-butadiene, isoprene or naphthenics.

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26. (amended) The process of Claim 17 wherein the monomer further comprises at least one of propene, isobutylene, 1-butene, 1-hexene, 4-methyl-1-pentene, 1-octene, 5-ethylidene-2-norbornene, piperylene, styrene, halo- or alkyl substituted styrenes, tetrafluoroethylene, vinylbenzocyclobutene, 1,4-hexadiene, 1,5-hexadiene, 1,7-octadiene, 4-vinylcyclohexene, vinylcyclohexane, 2,5-norbornadiene, 1,3-pentadiene, 1,4-pentadiene, 1,3-butadiene, isoprene or naphthenics.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The closest prior art is Cann et al. (US 20040167015) which discloses an ethylene polymerization process using a catalyst comprising a first component comprising chromium oxide supported on silica and a second component comprising silyl chromate supported on silica (see claim 38). However, the reference includes no working examples of the method, there is no disclosure of the claimed catalyst ratios, and no disclosure that the resultant polymer would show 400% improved ESCR and less than 15% increased swell in comparison to polymer made under the same conditions using only the chromium oxide catalyst.

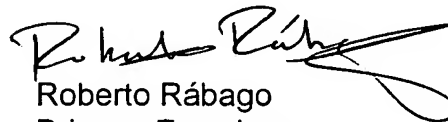
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Also of interest is Kral et al. (US 5,034,364) which discloses an ethylene polymerization process comprising chromium oxide and silyl chromate deposited on the same support (see abstract). The reference does not suggest the use of separate supports; further, the reference does not disclose that the resultant polymer shows 400% improved ESCR and less than 15% increased swell in comparison to polymer made under the same conditions using only the chromium oxide catalyst. In view of the difference in the polymerization method and the unpredictability of the catalytic art, there is no clear basis to conclude that the polymers made by the reference would be the same as, or obvious variations of those made by the claimed method.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberto Rábago
Primary Examiner
Art Unit 1713

RR

March 18, 2005